

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES

PAWTUXET RIVER WATER QUALITY FUND

Rules and Regulations for the Grant Program for
Municipalities Within the Pawtuxet River Watershed for
Planning, Engineering and Construction of
Facilities and Activities to Upgrade the Water
Quality of the Pawtuxet River

20 March 1990
Amended 14 January 2000

AUTHORITY: Regulations adopted pursuant to Chapters
46-12, 42-17.1 and 42-35 of the General Laws
of Rhode Island of 1956, as amended and Sections
1 (1) (g) and 7 (g) of Rhode Island Public Law 89-552

PAWTUXET RIVER WATER QUALITY FUND

Rules and Regulations

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1.00 PURPOSE - The purpose of these Regulations is to implement sections 1 (1) (g) and 7 (g) "Pawtuxet River Water Quality" of Rhode Island Public Laws Chapter 89-552, AN ACT TO PROVIDE AUTHORITY TO ISSUE BONDS AND NOTES TO FINANCE THE 1989 CAPITAL DEVELOPMENT PROGRAM. The purpose of this section of the law is to provide grants to the municipalities within the Pawtuxet River Watershed for planning, engineering and construction of facilities, and activities to upgrade the water quality of the Pawtuxet River. The grant program will be administered by the Office of Water Resources of the Rhode Island Department of Environmental Management.

2.00 AUTHORITY - These regulations are adopted pursuant to Chapters 46-12 and 42-17.1 of the General Laws of Rhode Island of 1956, as amended. These regulations are being promulgated in accordance with Chapter 42-35 of the General Laws of Rhode Island.

3.00 SEVERABILITY - If any of these regulations or the application thereof to any municipality or circumstances is held invalid by a court of competent jurisdiction, the remainder of the regulations shall not be affected thereby. The invalidity of any section or sections shall not affect the validity of the remainder of these regulations.

4.00 APPLICABILITY - The grants provided under these regulations are applicable only to the municipalities of Cranston, Warwick and West Warwick.

5.00 DEFINITIONS - Unless the context specifically indicates otherwise, the meaning of terms used in these Rules and Regulations shall be as follows:

Architectural/Engineering (A/E) Services -

Consultations, investigations, reports, or services for planning, design type, or construction projects within the scope of the practice of architecture or professional engineering as defined by the State of Rhode Island.

Clean Water Act (CWA) - The Federal law enacted under 33 U. S. C. Section 1251 et. seg as amended.

Construction - Erection, building, alteration, remodeling, improvements, or extension of buildings, structures or other property.

Cooperative Regional Agreement - A written agreement between and among the municipalities of Cranston, Warwick and West Warwick to develop, evaluate and consider regional solutions or remedies to improve and upgrade the water quality of the Pawtuxet River.

Design - Preparation of detailed plans and specifications (includes construction drawings, specifications, other contract documents).

Director - The Director of the Rhode Island Department of Environmental Management or his or her designee.

Engineering Services During Construction - the scope of work will generally include:

1. Those applicable services normally associated with engineering supervision and inspection during construction (e.g. resident inspection, interpretation of plans and specifications, resolution of technical problems, preparation of estimates of work in place, review of claims, shop drawings and change orders, etc.); and
2. Preparation and implementation of a final plan of operation, including the preparation of an operation and maintenance (O&M) manual

Individual Sewage Disposal System (ISDS) - Any system of piping, tanks, disposal areas, alternative toilets or other facilities designed to function as a unit to convey, store, treat and/or dispose of sanitary sewage by means other than discharge into a public sewage collection system.

Planning- (Facilities Planning) - All planning and studies necessary to meet the facility planning requirements of the State Clean Water Act, Rhode Island General Law 46-12, and other applicable Federal and Rhode Island State Regulations promulgated to implement the Federal Clean Water Act. A Facilities Plan investigates, identifies, and forecasts needs. A full range of alternatives to address those needs is evaluated based on various criteria including cost effectiveness over the life of the project and environmental impact.

Based upon the evaluation, an alternative is recommended and an environmental assessment of the alternative is performed. A final Facilities Plan will contain a description of the total recommended project, the contracts necessary to build the project, preliminary engineering data, costs and scheduling information on the design and construction of the project.

Severe Economic Hardship - If the total residential cost as a percentage (%) of median household income (MHI) is greater than two percent (2%), the community may declare severe economic hardship. The formulas for calculation are:

Total Residential Cost per Household as a Percentage of MHI =

$$\frac{\text{Average Residential Cost per Household}}{\text{Average MHI}}$$

$$\text{Average Residential Cost per Household} = \frac{\text{Residential Flow Proportion} \times (\text{OM\&R Costs} + \text{Debt Financing Costs})}{\text{Number of Households}}$$

$$\text{Where Residential Flow Proportion} = \frac{\text{Flow per Household} \times \text{Number of Households}}{\text{Current Average Flow}}$$

Wastewater Treatment Facility - Any equipment, devices, and systems, for preventing, abating, reducing, storing, conveying, treating, separating, recycling, reclaiming, or disposing of wastewater from domestic, commercial and industrial sources or any combinations of such, excluding Individual Sewage Disposal Systems.

6.00 GOAL - The goal of the Fund is to provide financial assistance to the three Pawtuxet municipalities of Cranston, Warwick and West Warwick to address water quality problems of the Pawtuxet River and meet the Rhode Island Pollutant Discharge Elimination System permit limitations.

7.00 AVAILABLE FUNDS - Up to ten million dollars (\$10,000,000.00) is to be allocated to the Rhode Island Department of Environmental Management to be available for grants to the three Pawtuxet municipalities of Cranston, Warwick and West Warwick for ninety percent (90%) of the eligible costs incurred for the planning, design and construction of advanced wastewater treatment facilities and associated water pollution control actions and construction activities to improve water quality within the Pawtuxet River Watershed provided that the three municipalities enter into a cooperative regional agreement to address the water quality problems of the Pawtuxet River. This agreement must be reviewed and commented upon by the Rhode Island Department of Environmental Management and executed by the municipalities before any grants are awarded. Certification that the ten percent (10%) local share of the project cost is available shall be required for the receipt of state grant funds unless any municipality can demonstrate to the Director that such share will constitute a severe economic hardship to that community. The municipality may submit to the Director in place of the calculations of severe economic hardship (See Definitions Section 5.00), a Financial Capability Analysis based on E.P.A.'s Financial Capability Guidebook and any additional calculations or documentation to prove the required match

would place a severe economic hardship on the municipality. The municipalities can not use any other state grant funds for their local match of the ten percent (10%) share.

8.00 ELIGIBILITY REQUIREMENTS

- A. Cooperative Regional Agreement. Prior to execution of the written cooperative regional agreement among the three Pawtuxet municipalities of Cranston, Warwick and West Warwick, the draft agreement must be reviewed and commented upon by the Rhode Island Department of Environmental Management. This agreement shall be modified prior to the commencement of the design phase and the construction phase, to accommodate any regional wastewater treatment activities. These modifications to the agreement will also be reviewed by the Rhode Island Department of Environmental Management.
- B. Any subcontract work performed for the benefit of all three (3) municipalities of Cranston, Warwick and West Warwick shall be coordinated by a single Architectural/Engineering (A/E) Services firm to be designated through the Cooperative Regional Agreement. All information and data produced by this work effort will be shared equally by the three municipalities of Cranston, Warwick and West Warwick. Only the designated A/E firm responsible for the administration of the subcontract will be eligible for overhead and profit remuneration.
- C. Request for Proposals (REP) for Facilities Planning and Design. The REP must be reviewed and accepted by the Department of Environmental Management.
- D. A/E Services Agreements. The Department of Environmental Management will review, and reserves the right to require

amendments to, the scope of services for all A/E services agreements, and subagreements in excess of ten thousand dollars (\$10,000.00) to meet all applicable state and federal requirements. Specific contract provisions that are required include the following:

1. General - Each A/E services agreement, and subagreement in excess of ten thousand dollars (\$10,000.00) must include provisions defining a sound and complete agreement, including but not limited to:
 - (a) Nature, scope and extent of work to be performed;
 - (b) Time frame for performance;
 - (c) Total cost of the A/E services agreement including cost estimate which indicates the estimated manhours for each Tasks and the direct cost, indirect cost, overhead and profit separately. The overhead rate must be documented by a recent audit performed by a federal or state agency; and
 - (d) Payment provisions.
2. Appropriate "Model subagreement clauses" as stipulated in Federal Regulations 40 CFR Part 33; Procurement Under Assistance Agreements, Subpart F. pare. 33.1030.
3. Time of Performance provision which will indicate the scheduled completion of all work, and all specific milestones, such as submittal of draft reports, final reports, etc., as required by the Consent Decree. In addition, each A/E agreement must include a detailed schedule which reflects the time frames for completing all work under each of the tasks, indicates the sequence in which the tasks must be completed, identifies significant subcontractor inputs and indicates the interrelationships and interdependencies between work items that control progress of the overall scope of work.

4. The A/E firm shall establish and maintain the necessary programs to be in conformance with all Rhode Island State Laws, and Rules & Regulations pertaining to Equal Employment Opportunity/Affirmative Action.
5. Project Team - The A/E firm shall employ on the work a qualified project team. The A/E firm shall designate a representative with authority to act for the A/E firm. The project representative shall be designated in writing.
6. Subcontracts - The A/E firm must warrant that it will not subcontract any portion of the tasks or subtasks it is obligated to perform under the Agreement without the prior written consent of the Owner. Execution of the said Agreement would constitute such consent concerning any subcontractor specifically named in the Agreement.
7. The A/E firm shall maintain during the life of the Agreement such minimum public liability and property damage insurance as may be required by the General Laws of Rhode Island. The A/E firm shall also maintain professional liability insurance covering damages resulting from errors or omissions of the A/E firm. The limit of liability shall not be less than five hundred thousand dollars (\$500,000.00) for the work under this A/E Services Agreement.

E. Department of Environmental Management Approvals. The Department of Environmental Management will review and approve the following:

1. Plan of Study for Facilities Planning Effort;
2. Facilities Plan or Update;
3. Environmental Information Document/E.I.S.;
4. Preliminary Engineering Design Report;
5. Value Engineering Study Report for any projects exceeding ten million dollars (\$10,000,000.00);
6. Plans and Specifications including final design prior to notice of bid;
7. Construction Contracts; and,
8. Other approvals specifically required within the Consent Decree and Judgement for Advanced Wastewater Treatment, and all other approvals specifically required by federal or state laws applicable to the bond fund or administration thereof.

F. Permits/Approvals/Assents. All other necessary permits/approvals/assents from other State or Federal agencies with jurisdiction over the project must be obtained.

G. MBE/WBE Requirements. All contractors including A/E Services (if applicable), will be in compliance with the State of Rhode Island Minority Business Enterprise Regulations implementing, in part, Section 1 of the Public Laws of 1986, Chapter 493 (R.I. General Laws, Chapter 37-14.1). Documentation of compliance from the Director of the Rhode Island Department of Administration must be provided to The Department of Environmental Management.

H. Eligible/Ineligible Costs. Project cost eligibility and reimbursement shall be based on approvals issued by the Rhode Island Department of Environmental Management for all engineering agreements and construction contracts. Direct costs associated with procurement, such as advertising and printing, shall also be eligible. The costs associated with modeling efforts which may be necessary to determine the feasibility, water quality impacts and the cost effectiveness of the alternative wastewater solutions shall be eligible. Any scientific sampling or modeling effort directed at questioning the validity of the following documents shall be ineligible:

- 1) Liberti, Angelo S., (1987) A Waste Load Allocation for DO/BOD Dynamics of the Pawtuxet River, Rhode Island, M.S. Comprehensive Report, URI.
- 2) McCarthy, Brian J., (1986) Fate and Transport of Scam Metals in the Pawtuxet River, M.S. Thesis, URI
- 3) Quinn, James G., Hoffman, Eva J., Latimer, James- S., and Constance G. Carey, (1985) A Study of the Water Quality of the Pawtuxet River: Chemical Monitoring and Computer Modeling of Pollutants, Volume 1: Chemical Monitoring of Pollutants in the Pawtuxet River, pp. 249.
- 4) Scott, Kevin and Raymond M. Wright, (1987) Modeling Dissolved Oxygen in Transient Flow Conditions.
- 5) Wright, Raymond M., and Brian J. McCarthy, (1985), A Study of the Water Quality of the Pawtuxet River: Chemical Monitoring and Computer Modeling of Pollutants, Volume 2: Computer Modeling of Toxic Pollutants in the Pawtuxet River, pp. 173.

6. Rhode Island Department of Environmental Management, Office of Water Resources, (1988) Pawtuxet River Waste Load Allocation Strategy for the development of RIPDES Permit Limits.
7. Rhode Island Department of Environmental Management, Office of Water Resources, (1988) Responsiveness Summary to Comments Received on the Draft RIPDES Permits for the Cranston, Warwick and West Warwick WWTFs.

The sole exception to this limitation is that if such work is performed at municipal expense, and if such work serves as the basis for the Director of the Rhode Island Department of Environmental Management to subsequently issue significant modifications to the RIPDES permit effluent limits, or require additional treatment not addressed by or contained in the current permit, the expenses for such effort shall be an eligible and allowable grant cost.

9.00 EVALUATION OF REGIONAL ALTERNATIVES DURING FACILITIES PLANNING

- A. Each municipality shall develop and screen each possible regional alternative considered with respect to that municipality itself.
- B. Under provisions established in the Cooperative Regional Agreement, a committee composed of representatives of the three (3) municipalities of Cranston, Warwick and West Warwick and the Department of Environmental Management will be formed for the purpose of evaluating regional alternatives. The committee will initially screen all alternatives, including those listed below, to determine the feasibility of each and decide which alternatives will be further evaluated. The committee's determination shall be based on information and documentation provided by the A/E firms as part of the alternative development. As a minimum,

the following regional alternatives must be evaluated as part of the Facilities Planning process:

- 1) Regional advanced wastewater treatment facility(ies) versus individual advanced wastewater treatment facilities or alternatives.
- 2) Discharge of secondary treated effluents of two or more of the municipalities into the Providence River in the area of the Field's Point Wastewater Treatment Facility.
- 3) Discharge of advance treated effluents of two or more of the municipalities into the Narragansett Bay.
- 4) Providing advanced treatment with alternative discharge locations on the Pawtuxet River to improve the characteristics of the dissolved oxygen sag curve.
- 5) Sludge handling treatment and disposal.

Each of the remaining alternatives considered feasible will be further evaluated by only one of The A/E firms. Upon conclusion of all of the A/E firms evaluations, the results will be presented to the municipalities.

C. Again under provisions established in the Cooperative Regional Agreement, the three (3) municipalities will form a consensus of opinion on the ranking of all the alternatives evaluated.

D. The Phase I facilities plan for each community shall include that community's engineering evaluations and the ranked alternatives.

E. Upon concurrence by Rhode Island Department of Environmental Management, the requirement for consideration of regional alternatives is met.

10.00 PROCUREMENT PROCESS

10.10 PROCUREMENT OF PLANNING OR DESIGN SERVICES

- A. Public Notice of Request for Proposals (RFPs). The municipality must give adequate public notice for competitively negotiated procurement of A/E services. The notice of a request must state how to obtain associated documents. Requests for proposals must be written, contain enough information to enable a prospective offeror to prepare a proposal, contain all evaluation criteria and the relative importance attached to each, and clearly state the deadline and place to submit proposals.
- B. Evaluation of proposals. The municipalities must uniformly and objectively evaluate all proposals submitted in response to the request for proposals. Municipalities must base their determinations of qualified offerors and acceptable proposals solely on the evaluation criteria stated in the request for proposals.
- C. Selection procedure for negotiation and award of subagreement for A/E services. The municipality will use responses to requests for statements of qualifications to determine the most qualified A/E firms or firm. After selecting and ranking the most qualified A/E firm or firms, the municipality will request technical proposals from the offeror or offerors and inform them of the evaluation criteria the municipality will use to rank the proposals. The municipality shall attempt to negotiate fair and reasonable compensation with the A/E firm.
- D. Use of same A/E firm during construction. If the municipality is satisfied with the qualifications and performance of the A/E firm who provided design services for the project and wishes to retain that firm or individual during construction of the project, the municipality may do so without further public notice and evaluation of qualifications provided original procurement was in accordance with Sections A, B. and C.

10.20 PROCUREMENT OF CONSTRUCTION CONTRACTS

- A. Formal advertising procurement method. The requirements in this section shall apply to formally advertised construction contracts in excess of ten thousand dollars (\$ 10,000.00). Formal advertising means the public solicitation of sealed bids and the award of a construction contract based on a fixed price (lump sum, unit price or a combination of the two) to the lowest responsive, responsible bidder.
- B. Formal advertising requires at a minimum:
1. Complete, adequate, and realistic specifications or purchase description of what is required;
 2. The opportunity for responsible bidders who are willing and able to compete effectively for the municipalities' business;
 3. A procurement that lends itself to the award of a fixed-price contract;
 4. That the selection of the successful bidder be made principally on the basis of price.
- C. Public notice and solicitation of bids. The municipality shall give adequate public notice of the solicitation, inviting bids and stating when and how the bidding documents may be obtained or examined.
- D. Time for Preparing Bids. The municipality must allow a minimum of thirty days, but not more than ninety (90) calendar days between the date the public notice is first published and the date by which bids must be submitted.
- E. Adequate bidding documents. The municipalities' bidding documents shall include:
- 1) A complete statement of work to be performed including, where appropriate, design drawings and specifications and the required performance schedule;

- 2) The terms and conditions of the construction contract to be awarded, including payment, delivery schedules, point of delivery and acceptance;
 - 3) A clear explanation of the municipalities' method of bidding and the method of evaluating bid prices, and the basis and method for awarding the construction contract;
 - 4) Any other responsibility requirements or evaluation criteria which the municipality will use in evaluation of bids;
 - 5) The deadline and place to submit the bids.
- F. Public opening of bids. The municipality shall publicly open bids at the place, date and time announced in the bidding documents.
- G. Award to the lowest, responsive, responsible bidder.
- 1) The municipality shall award all bids in accordance with the methods and criteria in the bidding documents.
 - 2) The municipality shall award a fixed-price construction contract to the lowest, responsive, responsible bidder. Where specified in the bidding documents, the municipality shall consider factors such as discounts, transportation costs and life cycle costs to determine the low bid only when prior experience of the municipality indicates that it generally accepts such discounts.
 - 3) The municipality may reject all bids only when it has sound, documented business reasons which are in the best interest of the program.

11.00 PAYMENTS - Payments under these grants are on a reimbursable basis.

The municipality must submit source documents to prove incurred costs.

Expenditures made by the municipalities after the effective passage of the act on 11 July 1989 shall be eligible for reimbursement with the prior written approval of

the Department of Environmental Management. DEM will review and certify payment for ninety percent (90%) of the eligible costs.

12.00 NON-COMPLIANCE - Failure to comply with all terms and conditions of the grant agreement may result in any of the following sanctions:

- A. Withholding of payments
- B. Suspension or termination of the grant for cause
- C. Annulment of the grant
- D. Other appropriate administrative proceeding
- E. Institution of judicial proceedings

13.00 TERMINATION OF THE FUND - Upon the finding of the Director that all monies have been expended, the fund shall be terminated.

The foregoing rules and regulations, after due notice and hearing, are hereby adopted and filed with the Secretary of State this 14th day of January, 2000, to become effective twenty (20) days thereafter, in accordance with the provisions of Chapter 46-12, 42-17.1 and 42-35 of the General Laws of Rhode Island of 1956, as amended and Section 1 (1) (g) and 7 (g) of Rhode Island Public Law 89-552.

Director

Department of Environmental Management

Notice given on 27 October 1999

Effective 03 February 2000